

ABSTRACT

A light modulator comprises a mirror, a substrate provided with at least one electrode, and at least one hinge extending between the substrate and the mirror. The mirror is flexible with the hinge being displaceable for allowing for the displacement and/or the deformation of the mirror. Typically, there are two symmetrically disposed hinges, each including upper and lower arms that define an angle therebetween. The upper arm is connected to the mirror, and the lower arm is mounted to the substrate. The upper and lower arms are adapted to pivot relative to one another thereby allowing the angle to vary and thus allowing the mirror to at least one of displace and deform. When unbiased, the mirror may be plane, convex or concave. When biased, the plane mirror adopts a curved attitude, whereas the curved mirror changes its curvature. The upper and lower arms of each hinge are V-shaped and define an apex. The apexes extend inwardly in a facing relationship.